

Appl. No. 09/895,656
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Reply to Office Action of 01/19/2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended)

A system comprising ~~a first an~~ an ATM destination transmission device, the ~~first~~ ATM destination transmission device having:

a destination hold circuit to hold determined selector identification;

a first destination receive circuit to receive a setup message having first selector content and establish a ~~connection;~~ connection on an ATM network;

a second destination receive circuit to receive on the connection a first ATM-data message having a first data from an ATM source transmission device;

a destination read circuit coupled to the first destination receive circuit and the destination hold circuit, the destination read circuit to read the first selector content and compare the first selector content to the selector identification; and

a destination compose circuit coupled to the second destination receive circuit and the destination read circuit, the destination compose circuit to compose a second data message having a ~~to-be-transmitted~~ second data based on the ~~received~~ first data and an address of the ATM source transmission device and to send the second data message if the first selector content corresponds to the determined selector identification.

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2. (currently amended)

The system defined in claim 1 wherein at least a portion of the ~~to-be-transmitted~~ second data is the ~~received~~ first data.

3. (currently amended)

The system defined in claim 1 wherein the ~~transmitted~~ second data is the ~~to-be-received~~ first data.

4. (currently amended)

The system defined in claim 1 wherein the ~~first-ATM~~ destination transmission device includes a ~~processing device~~ processor to respond to a coupled stored program, and the ~~processing device~~ processor responding to the stored program includes at least one of the first destination receive circuit, the second destination receive circuit, the destination read circuit, and the destination compose circuit.

5. (currently amended)

The system defined in claim 1 further including a ~~second-ATM~~ source transmission device, the ~~second-ATM~~ source transmission device having:

a first compose circuit coupled to the first destination receive circuit, the first compose circuit to compose the setup message having the first selector content;

a second compose circuit coupled to the second destination receive circuit, the second compose circuit to compose the first ATM-data ~~message; message and to transmit the~~ first data message to the second compose circuit; and

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~~a transmit circuit to transmit the first ATM data message to an ATM transmission device,~~

~~and~~

a compare circuit coupled to the second compose circuit and to the destination compose circuit, the compare circuit to compare the ~~transmitted~~ first data to the ~~received~~ second data if the ATM source transmission device receives the second data message.

6. (currently amended)

The system defined in claim 5 wherein the ~~second~~ ATM source transmission device includes a ~~processing device~~processor to respond to a coupled stored program, and the ~~processing device~~processor responding to the stored program includes at least one of the first compose circuit, the second compose circuit, the transmit circuit, and the compare circuit.

7. (currently amended)

The system defined in claim 5 wherein the ~~second~~ ATM source transmission device includes a trace circuit coupled to the destination compose circuit, the trace circuit to receive an information element characterized by one of a trace information element containing hop information and a pathtrace information element containing pathtrace information, and a ~~circuit~~ to transmit at least a portion of the information element to a user interface.

8. (currently amended)

The system defined in claim 5 wherein the ~~second~~ ATM source transmission device includes a trace circuit coupled to the destination compose circuit, the trace circuit to receive an information element characterized by one of a trace information element containing hop information and a pathtrace information element containing pathtrace information, and a

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~~formatting circuit~~ to format at least a portion of the information element for at least one of
displaying the portion of information on a display terminal and printing the portion of
information on a printing device.

9. (currently amended)

A method comprising:

a ~~first~~-ATM source transmission device sending a setup message having an address
selector set to a determined value to cause a ~~second~~-ATM destination transmission device
to send a first confirming data message in response to receiving the first data message to
establish an ATM connection between the ~~first~~-ATM source transmission device and the
~~second~~-ATM destination transmission device data, and to reflect a subsequent data
message on the connection;

the ~~first~~-ATM source transmission device establishing a connection between the ~~first~~
ATM source transmission device and the ~~second~~-ATM destination transmission device in
response to the ~~second~~-ATM destination transmission device receiving the setup message;
and

the ~~first~~-ATM source transmission device sending a first data message to the ~~second~~
ATM destination transmission device after the ~~first~~-ATM source transmission device
establishes the connection, the first data message having a ~~transmitted~~ first data.

10. (currently amended)

The method defined in claim 9

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wherein the ~~first~~-ATM source transmission device sending ~~a startup~~-the setup message includes the ~~first~~-ATM source transmission device attaching a trace information element to the ~~startup~~-setup message;

the establishing a connection includes the ~~first~~-ATM source transmission device receiving the received trace response; and

the ~~first~~-ATM source transmission device sending at least a portion of the received trace response to a user interface.

11. (currently amended)

The method defined in claim 9 further including

the ~~second~~-ATM destination device receiving the setup message;

the ~~second~~-ATM destination device reading the address selector, ~~selector~~-byte;

the ~~second~~-ATM destination transmission device receiving the first data message;

if the read-address selector byte corresponds to the determined value, the ~~second~~-ATM destination transmission device sending a second data message to the ~~first~~-ATM source transmission device having a second data that includes at least a portion of the ~~received~~ first data.

12. (currently amended)

The method defined in claim 11 further including

the ~~first~~-ATM source transmission device receiving the second data message; and

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the ~~first~~ ATM source transmission device comparing the ~~transmitted~~ first data to the
~~received~~ sent second data.

13. (currently amended)

A method comprising:

a ~~first~~ ATM destination transmission device receiving a setup message having a first
address selector from a ~~second~~ ATM source transmission device; ~~device having a first~~
~~address selector content~~;

establishing a connection ~~being established~~ between the ~~first~~ ATM destination
transmission device and the ~~second~~ ATM source transmission device;

the ~~first~~ ATM destination transmission device receiving a first data message having a first
data on the connection; ~~connection having a received first data~~;

the ~~first~~ ATM destination transmission device comparing the first address selector ~~byte~~ to
a special-determined address selector ~~byte~~ of the ~~first~~ ATM destination transmission
device and if the first address selector ~~content~~ corresponds to a ~~special~~ the determined
address selector, ~~selector identification~~, the ~~first~~ ATM destination transmission device
composing and sending a second data message to the ~~second~~ ATM source transmission
device having at least a portion of the sent second data corresponding to the ~~received~~ first
data.

14. (currently amended)

The method defined in claim 13 further including:

the ~~second~~ ATM source transmission device composing the setup message;

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the ~~second~~-ATM source transmission device composing the first data message to have a
the first data;

the ~~second~~-ATM source transmission device sending the first data message wherein the
~~received~~-first data message coincides with the ~~received~~-first data message of claim 13.

15. (currently amended)

The method defined in claim 13 further including:

the ~~second~~-ATM source transmission device receiving the sent second data message; and
the ~~second~~-ATM source transmission device comparing the sent second data to the
~~transmitted~~-first data.

16. (currently amended)

A machine-readable medium that provides instructions which, when executed by at least one
processor on an ATM destination transmission device, cause said processor to perform
operations comprising

receiving a first ATM setup message from a ~~first~~-ATM source transmission ~~device~~-device,
the first ATM setup message having a destination address-address, the destination address
having a first selector content;

establishing a connection between the ATM destination transmission device and the ~~first~~
ATM source transmission device;

reading the first selector content and comparing the first selector content to a selector
identification;

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receiving a first ATM data message on the ~~connection-connection~~, the first data message

having a first data; and

if the selector content corresponds to the selector identification, composing a second data message having a ~~transmitted~~ second data based on the ~~received~~ first data and causing the

ATM destination transmission device to send the second data message on the connection.

17. (currently amended)

The operations defined in claim 16 wherein the second data is one of at least a portion of the ~~received~~ first data and an algorithmically transformed data based on at least a portion of the ~~received~~ first data.

18. (currently amended)

The operations defined in claim 16 wherein the ~~transmitted~~ second data is the ~~received~~ first data.

19. (currently amended)

The system defined in claim 5 wherein the ~~second~~ ATM destination transmission device includes a circuit to receive one of a trace information element containing hop information and a pathtrace information element containing pathtrace information, and a circuit to transmit at least a portion of the hop information to a ~~usr~~ user interface.

20. (currently amended)

An ATM destination transmission device that includes a circuit to receive an information element characterized by one of a trace information element containing hop information and

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a pathtrace information element containing pathtrace information, and a circuit to format at least a portion of the information element for outputting to a terminal.

21. (currently amended)

The ATM destination transmission device defined in claim 20 wherein the terminal includes ~~at least one of~~ at least one of a display and a printer.

22. (currently amended)

The ATM destination transmission device defined in claim 20 that further includes a circuit to output the at least a portion of the information to the terminal

23. (currently amended)

An ATM destination transmission device that includes:

first means for holding a determined destination device selector identification;

second means for receiving a setup message having a first selector content and setting up a connection;

third means for receiving on the connection a first ATM data message having a first data from an ATM source transmission device;

fourth means for the destination device reading the first selector content and comparing the first selector content to the selector identification; and

fifth means for the destination device composing a second data message having a ~~to be transmitted~~ second data based on the ~~received~~ first data and an address of the ATM

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source transmission device and sending the second data message if the first selector content corresponds to the determined selector identification.

24. (currently amended)

The ATM destination transmission device defined in claim 23 wherein at least a portion of the ~~to-be-transmitted~~ second data is the ~~received~~ first data.

25. (currently amended)

The ATM destination transmission device defined in claim 23 wherein the ~~transmitted~~ second data is the ~~to-be-received~~ first data.

26. (currently amended)

The ATM destination transmission device defined in claim 23 wherein the ATM destination transmission device includes sixth means for responding to a coupled stored program and the sixth means responding to the stored program includes at least one of the ~~setup message~~ destination receive circuit second means, the ~~data message destination receive circuit third~~ means, the ~~destination read circuit fourth~~ means, and the ~~destination compose circuit fifth~~ means.

27. (currently amended)

An ATM destination transmission device that includes

a first destination receive circuit to receive a setup message from an ATM source transmission device and establish a connection with the ATM source transmission device;

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a ~~first destination hold~~ circuit to store a selector ~~code byte~~ identification for a service to reflect back to the ATM source transmission device ~~of a connection~~ at least a portion of a data transmitted by the ATM source transmission device if the setup message for the ~~source transmission device~~ includes a selector code equivalent to the selector identification; code byte identification from the source;

~~a first receive circuit to receive a setup message having a first selector content and establish a connection;~~

a second destination receive circuit to receive on the connection a first ATM data message having a first data from an ATM source transmission device;

a destination read circuit to read the ~~first selector code content~~ and compare the first selector ~~code content~~ to the stored selector ~~code byte~~ identification; and

~~if the selector identification binary value is equivalent to the stored selector code byte identification, a destination compose circuit to compose and to send to the ATM source transmission device a second data message having a second data based on the received first data. data if the selector code is equivalent to the stored selector identification.~~

28. (currently amended)

The ATM destination transmission device defined in claim 27 wherein the ~~to be transmitted~~ second data is the ~~received~~ first data.

29. (currently amended)

The ATM destination transmission device defined in claim 27 that includes a ~~processing device~~ processor to respond to a coupled stored program, and the ~~processing device~~ processor

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responding to the stored program includes at least one of the first destination receive circuit,
the second destination receive circuit, the destination read circuit, and the destination
compose circuit.